

## LIVE STOCK HUSBANDRY

### SHEEP RAISING PAYS.

When Properly Cared For They Are Valuable Farm Animals.

The principles of sheep husbandry must first be learned in order to be successful in the business and derive a profit, writes a correspondent of the American Cultivator. That sheep are valuable on a farm is certainly true. The fertility of any land which is run down can very quickly be built up again if sheep are placed upon it. For this reason the sheep has its proper name, the "golden wool." It may be mentioned right here that sheep will never thrive and do well if kept on low, wet, marshy land. They will always improve the fertility of the land on which they are and by no means ever lower it.

It is an undisputed fact that the manure of sheep is much richer than



The Hampshire breed of sheep, which somewhat resembles the Shropshire, is increasing in popularity in this country. It has many points commending it as a farm breed. One of its strong characteristics is the rapid growth made by the lambs when young. Hampshire is the largest of the medium wool breeds. They are heavy animals and for grazing on rough land are perhaps not so well adapted as some of the lighter and more active breeds. The picture shows a prize winning Hampshire ram.

that of other live stock, with the exception of that of chickens. And furthermore, they themselves spread the manure more evenly on the land than any manure spreader can do that has as yet been invented. A good heavy crop of grain, corn or vegetables may be expected when a coat of sheep manure has been applied on the land.

Another advantage of keeping sheep is that they are very fond of weeds and will eat some of them in preference to good grass. Authorities claim that sheep will eat over 400 of the 700 different kinds of weeds which grow on our farms. Many times they will also eat the waste grass around fences and corners which is left by other stock.

It is a general complaint nowadays all over the country that competent labor is very scarce, but it must be said that at the time when the farmer is busiest with his plowing, seeding, cultivating and harvesting, his sheep will cause him the least amount of work, and thus may be called labor savers. If at this time they have enough grass to eat, good fresh water to drink and have access to salt at all times they will be fully satisfied.

### AVOID FROZEN ROOTS.

Frost Bitten Vegetables Are Unsafe Feed For Live Stock.

"Never feed frost bitten potatoes, roots or other vegetables to live stock; the risk is too great."

This is the advice of an experienced stockman who knows of the trouble and even losses which are almost certain to follow feeding frozen food of any kind.

"At this time of the year farmers are often tempted to utilize waste vegetables and roots by feeding them to cows, hoping that no harm will result if the roots have been frozen trouble naturally follows."

"The introduction of heavy, chilled vegetable matter into the stomach of an animal naturally causes a sudden reaction, and it is not unlikely that the food value of the material is much reduced. Stockmen cannot afford to take any chances in feeding frozen vegetables to their herds and flocks."—Wisconsin Experiment Station.

### Distemper in Horses.

Distemper in a horse will run a full course and cannot be stopped by the use of medicine. Any symptoms which appear should be treated according to their severity. The use of proper grain feeds and a course of tonics is about all that is necessary in mild cases. If abscesses appear in the region of the throat these, of course, should be opened, well drained and the cavities flushed with an antiseptic solution. As a treatment for intestinal worms give a pint of raw linseed oil to which has been added one ounce of turpentine, the same to be given for three consecutive days. Following this give a tablespoonful twice daily of a mixture of equal parts of salt, powdered iron sulphate and sulphur for ten days.

### Hint For Hog Raisers.

It is a common mistake with many to try to keep too many sows, or more than they can give proper attention to during the periods of pregnancy, birth and suckling. During all three periods they must be cared for correctly if good results are expected with the litters.

## FARMER MUST USE HIS BRAIN

"If the farmer of today succeeds he must use his brain," said Professor D. H. Otis of the University of Wisconsin in addressing the American Farm Management association, of which he is retiring president. "In the past the farmers, by taking the stored up fertility that has been the result of ages of accumulation, have been little more than miners moving from farm to farm, and by their system of crop production have been taking from the soil the elements of plant growth and restoring nothing therefor."

"The future farmer, as represented in the well trained agriculturist, is one who will look upon his farm operations in a businesslike way and will conduct it upon business principles. When he reaches the point where he gets good returns for his capital invested and his own labor and that of his own family and at the same time maintains and even increases the fertility of the soil, he will indeed become, and truly, a farmer."

## MARKETING TURKEYS.

Best Methods of Killing and Shipping the Fowls.

It is not the largest turkey that sells the quickest in market, says M. K. Royer in the American Cultivator. The demand generally is for fat and plump birds of medium size, for which at all seasons an extra price can be obtained. After the holidays turkeys weighing eight to ten pounds sell best.

Quite as much care and attention are needed in killing, dressing and shipping as in the growing. If this cannot be done to good advantage it is best to sell the birds alive. So much depends upon proper marketing that small growers should either dress and sell to their home market or sell to some one who makes a business of handling such stock.

None but well fattened stock should be killed. There is no profit in sending poor birds to market. For twenty-four hours prior to butchering no food must be given. This enables the crop and entrails to become empty and avoids much of the danger of spoiling. When the crop and entrails are full it depreciates the value of the carcass and quite frequently taints the meat, preventing its being kept for any length of time.

There are different methods of killing, one being to tie the feet together.



A TURKEY GROWN FOR THE HOLIDAYS.

hang the bird on a pole and cut the throat so as to bleed freely. In killing one of the most important points is to suspend the fowl by the shanks, head down, and cut or stick in the roof of the month. This severs the arteries and cuts into the brain, causing insensibility and a free flow of blood from the month.

Another method is to break the neck by a quick twist or jerk backward. When the neck is completely disjointed the head is pulled away so as to form an open space in the neck in which the blood may settle. This method calls for considerable practice and is not very popular nowadays. The old time method of killing was to behead the fowl with an ax or hatchet.

The carcass should be dry picked. This is done immediately after killing, care being taken not to break the skin or tear the flesh. It is then hung up, head down, in a cool place until all animal heat has left the body. The head, feet or entrails are not removed. The head, wings and tails are usually left on.

In shipping, pack as closely as possible into close boxes or barrels, lined with white or manilla paper; brown, soiled or printed paper must not be used. The packing must be done in such a manner as to prevent the carcasses from shifting about in transit.

### Bridging of Fence Wire.

In districts where bridges are few and the old time foot log is out of date bridges are now constructed of woven wire fencing stretched across the stream like a narrow lane about thirty inches wide, says a contributor to the Farm and Fireside. Two by four crosspieces are laid every few feet on the large bottom wire and are stapled so they cannot slip. The floor is laid on these. The ends of the bridge are fastened to trees when convenient, but if posts have to be used they must be well braced. A guy wire or truss wire runs from the upper corners of the ends to the bottom of the center. If this is drawn tight the bridge will really bow up in the center. This bridge is safe for children or old people who could not traverse a log.

## EGGS and POULTRY

### PROFIT IN POULTRY.

Winter Egg Production Depends on Care and Feeding.

It is time the pullets which are to produce winter eggs should have commenced operations, says the Western Poultry Journal. It is much easier to induce pullets to lay before settled cold weather sets in than later. Pullets which do not commence to lay by the middle of November are not apt to begin until late in the winter or spring, and it will hardly pay to keep them over, especially if there are plenty that will lay. While winter eggs are



The Light Brahma being among the largest of domesticated fowl and very hardy, its qualifications as a meat breed has always been recognized. A fully developed Light Brahma furnishes an ideal carcass as a roaster. Besides, the hens are good layers, producing most of their eggs during the winter months. They are also good setters. They are docile in temperament and stand confinement well. They are excellent birds for the back yard and small lot.

not the "whole thing," the bulk of the profit in poultry keeping is made at this season of high prices.

To have hens must winter pullets, and if by a little extra feed and care we can induce each pullet to produce \$1 worth of eggs during the cold months it will add materially to the profit the flock will yield during the year. It may, and probably will, pay to winter hens for their summer production. But why not have all the year layers and a steady income from the poultry? This can be done by judicious breeding, feeding and care.

To get eggs we must supply the hen with the proper ingredients from which to grow the egg. If every element needed is supplied in the right proportion the hen must lay or store them up in the body in the form of flesh or fat. If house conditions are right and the hens made contented and happy they will lay if the laying instinct is in them.

The ration should be composed about as follows: Fifty-five per cent whole and ground grain, 15 per cent meat, 30 per cent succulent green food, such as roots, cabbage and other vegetables and clover or alfalfa hay. The winter laying pullet is one that has been fed and grown right from the time she left the shell. We cannot take pullets which have been fed any old way and get them in laying form in a few weeks. If they have not been rightly developed it may take several months of feeding to get them ripened so as to be good producers, while some never will be.

### PROFIT IN CLEAN EGGS.

Fowls Should Be Provided With Fresh Nesting Material and Litter.

Poultry keepers may easily reduce the percentage of dirty or soiled eggs and losses entailed to insignificant figures, says Arthur C. Smith of the Minneapolis College of Agriculture. First, an ample number of nests is, of course, necessary, but an ample number means no more than and probably not as many as are usually directed by poultry writers. Laying houses are, as a rule, provided with a sufficient number, but where the keeper falls down is in failing to supply enough nesting material and floor litter.

Obviously the nesting material must be clean or the eggs become soiled by contact, and it must be sufficient in quantity or the eggs are often broken by dropping upon the hard floor of the nest. In houses where the dropping boards are above the nests and the custom is to sand the boards small stones often drop into the nest and breakage results when newly laid eggs fall upon them. The condition of nests should be noticed daily and the nesting material replenished when necessary. Plenty of nesting material prevents breakage and insures clean eggs.

An ample and clean litter on the floor is also very essential when an Al clean product is sought. Particularly is this true when the hens are allowed outdoors during wet weather. The litter acts as a foot mat for the hens on their way to the nests.

Clean eggs bring better prices than dirty ones.

### Furnish Grit For Poultry.

Hens demand some mineral matter to form the shell of their eggs. Do not forget the oyster shell and the hard, sharp grit. These will furnish material for the formation of the egg's shell and at the same time will keep the fowls in a healthy condition.

## BACKBONE OF FARM PLAN.

The backbone of any successful farm plan is the system followed in crop production, says the Country Gentleman. About the first things the county agent looks into when he visits the farm are whether a well established rotation is consistently followed from year to year and whether this rotation is adapted to the type of soil, the climate and the uses to which the crops are put. Nearly every important improvement in the farm plan must follow the line of the rotation. The use of fertilizers must conform to it, and the silo, the storage facilities and the animals kept to consume the forage are all influenced by it.

## CAMPAIGN AGAINST INSECTS.

New Annual Report of Government Entomologist Shows Progress.

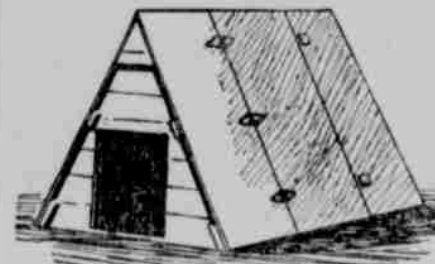
The control of such dangerous insects as the gypsy moth, cotton boll weevil, alfalfa weevil, green bug and potato tuber moth has kept the office of the United States department of agriculture's entomologist busy during the past year, according to the new annual report. Besides directing its attention to combating insects that attack crops, the office has been active in attempting to eradicate insects that affect the health of man and animals, such as malaria bearing mosquitoes, the spotted fever tick and the typhoid fly. Special attention has been given to insects injuring forests and those affecting stored products, such as grain, flour, prepared cereals, meat and cheese. Work in bee culture has also progressed satisfactorily.

The gypsy moth campaign, waged also against its cousin, the brown tail moth, has been very encouraging, there being a marked decrease this year in the numbers of both these pests. Parasites and beetles that attack these dangerous insects have been introduced and have been largely instrumental in bringing about good results. Colored posters were prepared by the office illustrating the gypsy moth and its natural enemies, and these were posted in all postoffices and town of fices in the infected districts, and copies were sent to granges and public libraries. The campaign has also been waged by mail and boy scouts, who have distributed cards bearing the same illustrations.

A combination spray composed of lime sulphur, arsenate of lead and nicotine has been used successfully during the year by many orchard growers to control insects and fungous diseases. Other poisons to control orchard insects have been developed and are now being tested. Arsenical sprays are being made more practicable for use in combating cranberry pests in New Jersey. Effective spraying has also been done in the peach orchards of the south. Interested growers should be in the department in the work. Remedies are also being recommended and developed for pests that endanger apple, peach and pear orchards.

### Economical Hog House.

The A type of hog house for farrowing sows is popular with many hog raisers. The house shown reproduced from Country Gentleman can be built to good advantage at small cost. The building shown is called the Economy house. It has floor dimensions of 5 by



7 feet. This house, built to use an earth floor, costs \$9.07, figured on the same basis as the regular Iowa or A house. From the standpoint of economy, this house at less than \$10 is the most convenient and handy movable or portable type.

## WINTERING BEES OUTSIDE.

It is a common practice in New England to winter bees on their summer stands, and this is a perfectly safe plan if suitable protection be given. Probably the simplest and most successful method is to keep the bees in ten frame hives and to replace the end frame on each side with a chaff division board. This confines the cluster to eight frames and keeps it away from the cold walls.

In any case the top of the hive should have careful attention, for that is where the greatest danger lies. The best plan is to tack a piece of burlap on the bottom of a super or a winter case and set it over the hive without any board under it. Then the super should be filled with shavings or chaff. This arrangement allows for the gradual escape of moisture from the hive and gives greater satisfaction than the use of a board over the hive. An ordinary fire cover may be used, but the new metal roof double cover is much to be preferred.

When this general plan is adopted it is a simple matter to feed the bees even in winter by using the sugar cakes now on the market. These cakes come in pie tins, which are inverted over the frames, and may be slipped in place at any time by simply raising the super a little.—American Agriculturist.

## MODERN METHOD OF CATTLE FEEDING

I selected in my own neighborhood a number of cows which I keep all the year, writes an Illinois breeder in the American Agriculturist. While these cows are not the best individuals, they are a fair sample of the cows found in the corn belt. I use a pure bred Angus bull on these grade cows for my feeders, because in my opinion I get a better type of calves all black, hornless, docile and excellent feeders.

It has been said that a pure bred bull is half the herd, and this is especially true when a pure bred sire is used on grade cows. It does not make much difference which breed the sire is chosen from. Whether he be Angus, Shorthorn or Hereford he should be a pure bred and characteristic of the breed which he represents.

When a farmer keeps on hand from twelve to sixteen head of cows with the same number of yearlings and suckling calves there is naturally quite a little expense involved in the way of pasture, grain, hay and other roughage. When land is selling for \$200 to \$250 an acre it seems almost a losing proposition to raise cattle, especially when corn is making sixty bushels to the acre and selling at 60 cents a bushel. However, the following method has proved very successful with me: The calves are allowed to run with the cows during the summer and early fall months, then they are wean-



The Aberdeen-Angus are the cattle of the Scottish highlanders. It is believed that they originated some 300 hundred years ago from a cross between the Galloway and the red Durham. These cattle when well fed are always smooth and ready for slaughter. They make fine baby beef and have won more prizes at the International Live Stock show at Chicago in recent years than any other breed. The illustration shows a pure bred Angus bull.

ed and put by themselves on pasture. Later in the season they are allowed the run of a stalk field and put up at night and fed a ration of grain and silage. In this way they are kept in a thrifty and growing condition during the winter.

The next spring, about the middle of May, they are turned out on pasture for the summer. In the early fall they are put in the feed lot and fed for the market. As soon as the young calves are weaned the majority of the cows are dried up and are carried through the fall and winter on pasture and the stalk fields. They also get such roughage as is raised on any corn belt farm. To keep a cow a year just for her calf necessitates the raising of a calf of the right beef type. If a cow falls below my standard she is disposed of and another procured in her place. A good calf at six or seven months should weigh easily 500 pounds.

### Hogs Following Cattle.

The number of hogs to follow a steer will depend on the method of feeding. Some farmers feed the steers more corn than they will eat and run extra hogs, figuring on the hogs getting the waste. While this may be a good policy when corn is cheap, it is doubtful if it should be practiced with high priced grain. It is usually best to figure on about one short per steer when shelled corn is fed and two when ear corn is fed. In case the corn is ground or soaked, or silage is used, the number of hogs necessary would be less. The aim should be to run enough hogs to clean up all the waste corn.

The Alma Record, \$1 a Yr.

## SILLO A NECESSITY IN MODERN FARMING

The silo may well stand as one of the great factors in increasing the efficiency of the farm through a better utilization of the products of the soil, says the Kansas Farmer. All through the corn belt is produced each year feed enough, if conserved by means of this great efficiency method of preservation, to feed all the live stock in the land. As at present handled from 75 to 80 per cent of the roughage part of the corn crop is absolutely wasted.

It has been abundantly demonstrated in modern practice that no man need say he cannot afford a silo. On farms heavily stocked with live stock, where everything raised finds mouths waiting and demanding even more, the farmer cannot afford to be without a silo. Under present day conditions the silo will reduce the cost of producing a pound of butter by at least 10 cents. It will



When first introduced the silo was regarded by many as a fad, as a plaything of the rich man, and was not given serious consideration as a permanent farm practice. That time has passed, and the silo can no longer be considered a passing fad, but as a permanent farm equipment. It is not necessary to present the extravagant claims which in times past were made for the use of the silo and silage. The bare statement of facts with no exaggeration whatever is sufficient to convince every farmer that the silo is indispensable.

likewise reduce the cost per 100 pounds of producing beef by \$2.50. True, the farmer cannot afford to be without a silo who is attempting to convert the rough feed of his farm into a marketable form in the most economical manner. For such the silo is an economic necessity. As has sometimes been stated, the farmer who attempts to get along without a silo under these conditions will find when he casts up his accounts at the end of the year that he has paid indirectly the cost of a silo through the loss sustained in failing to most efficiently utilize his crop. As a means of working out a permanent system of agriculture through the regions of scant rainfall the silo is well high indispensable. Its utility here cannot be questioned. In especially favorable years, when the crop is in excess of the immediate demands, the silo forms the only means of equalizing the years of poor crops which may possibly follow. Practically all that is required to place the farming on a safe basis is the accumulation of a sufficient capital through some means to secure the necessary equipment in silos.

The Wells Entertainers in programs of music, sketches readings, and original bits.

Musical and Dramatic Sketches.

Jan. 12 at Forest Hill

FOR JUST \$5.00

We have selected 6 pieces of Dress Goods, with all the findings complete, which we will sell this week for \$5.00. A sample of them is listed below:

Ladies' Home Journal Pattern 8529.

6 yds. Bedford Cord at 58c.	\$3.48
1 yd. Silk.	1.17
3 yds. lining	.18
1 1/2 doz. buttons.	.63
1 pattern	.15
1 card hooks & eyes	.05
1 spool silk	.10
3-8 yds. velvet.	.38
<b>Total</b>	<b>\$6.14</b>

Come in and see them displayed on the forms.

J. A. Gerhardt

FOR RENT:—House at 714 State, inquire C. G. Rhodes. 1868tf  
LOST:—Black Collie dog marked with yellow, sharp ears. Call Clarence Wheeler, Alma. 1868

"STEVIE"

Says he hasn't time to write an ad this week, but to drop into his new Victrola Store and talk it over personally.

Bldg. formerly occupied by European Cafe.

## January Clearance Sale BEGINNING JANUARY 7 Continuing throughout the Month

Men's Two-piece Underwear, regular 50c value, sale...	37c	Men's Night Shirts, \$1 value, sale...	79c	Men's Leather Gloves, 50c value, sale...	39c
Men's Union Suits, \$2.00 value, sale...	\$1.35	Ladies' Night Dresses, 50c value, sale...	39c	Men's Sweater Coats, \$1.50 value, sale...	98c
Men's Union Suits, \$1 value, sale...	79c	Men's Heavy Wool Sox, 50c value, sale...	39c	Men's Sweaters, \$4.25 value, sale, (all wool)...	\$3.15
Ladies' Union Suits, \$1 value, sale...	79c	Men's Heavy Wool Sox, 25c value, sale...	19c	Ladies' Kimonos, \$1.50 value, sale...	98c
Boys' Union Suits, 75c value, sale...	57c	Men's Heavy Wool Mittens, 50c value, sale...	39c	Ladies' House Dresses, \$1.25 value, sale...	79c
Boys' Union Suits, 50c value, sale...	39c	Men's Mittens, 25c value, sale...	19c	Misses' School Dresses, \$1.75 value, sale...	98c
Ladies' Night Dresses, \$1 value, sale...	79c	Cut Prices on Everything Except 5 and 10c Goods.			

BROWN'S BAZAAR